




MICROFLUIDIC CELL AND METHOD FOR SAMPLE HANDLING

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The present invention relates to a microfluidic cell and method for sample handling, and more particularly a cell (1) with a one-dimensional or two-dimensional array of ultrasonic transmitters (2) or resonance cavities for trapping biologically activated microbeads and passing fluids carrying samples interacting with the microbeads for detection and analysis. The invention allows for individual loading of the positions in the cell and individual detection steps enabling multistep biological assays to be performed on submicrolitre volumes. The invention also relates to an apparatus and method for blood plasma analysis incorporating such a microfluidic cell.

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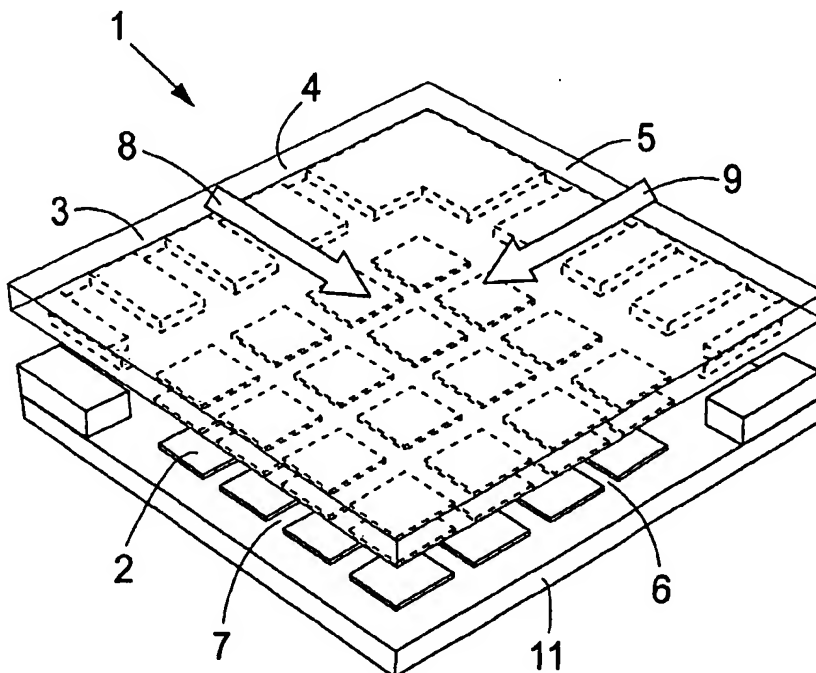
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(54) Title: **MICROFLUIDIC CELL AND METHOD FOR SAMPLE HANDLING**



(57) Abstract: The present invention relates to a microfluidic cell and method for sample handling, and more particularly a cell (1) with a one-dimensional or two-dimensional array of ultrasonic transmitters (2) or resonance cavities for trapping biologically activated microbeads and passing fluids carrying samples interacting with the microbeads for detection and analysis. The invention allows for individual loading of the positions in the cell and individual detection steps enabling multistep biological assays to be performed on submicrolitre volumes. The invention also relates to an apparatus and method for blood plasma analysis incorporating such a microfluidic cell.



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